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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,983	10/04/2005	Bradford J. Munch	6678-78359	3505
7590 Barnes & Thornburg 11 South Meridian Street Indianapolis, IN 46204				
			EXAMINER	
			ADDRESSEE, SARA	
			ART UNIT	PAPER NUMBER
			3724	
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			10/02/2008 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,983

Applicant(s)

MUNCH ET AL.

Examiner

SARA ADDISU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 and 47-54 is/are pending in the application.
4a) Of the above claim(s) 39-46 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-38 and 47-54 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 04 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/4/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

- Applicant's election without traverse of Claims 1-38 and 47-54 in the reply filed on 7/3/08 is acknowledged.
- Claims 39-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 5-9, 12, 17- 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lyon (USP 1,514,709).

LYON teaches a blade (13) for use cutting slots and channels (i.e. grooved face) the blade being removably insertable into a rotary tool body having a central bore (9), axially spaced apart radially extending side faces, and an outer peripheral portion configured to receive and hold a plurality of blades (13) peripherally spaced about the peripheral portion, the blade being generally flat to have a front side, a back side, a cutting edge to extend outwardly from the tool

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body, a base edge opposite to the cutting edge to extend into the tool body, and opposite first and second side edges between the cutting edge and base edge ('709, figures 1, 3 and 4 & page 1, lines 9-22). Please note, the phrase "a blade for cutting grooved face of a drive belt" does not further limit the claimed and are merely functional/intended use statements not defining any specific structure. It should be noted that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. The only requirement is that the prior art reference be capable of said intended use. See MPEP 2114. In this case, the cutters of Lyon are capable being used on a drive belt. Furthermore LYON teaches a positioning screw (16) and a wedge (15) configured to engage and hold the blade (13) against the outer peripheral portion of the tool body ('790, figure 5).). Regarding claim 20, LYON teaches a set of two peripherally spaced blades comprising a left-hand cutter blade and a right-hand cutter blade (both defining a shear angle) on the peripheral portion of the tool body ('790, figure 3).

2. Claims 1, 5, 7-9, 20-24, 26, 28, 29, 32, 36, 51-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Hetz (USP 4,496,269).

HETZ teaches a blade (55) for use cutting grooved face of belt sleeve; the blade being removably insertable into a rotary tool body having a central bore,

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axially spaced apart radially extending side faces, and an outer peripheral portion configured to receive and hold a plurality of blades (55) peripherally spaced about the peripheral portion, the blade being generally flat to have a front side, a back side, a cutting edge to extend outwardly from the tool body, a base edge opposite to the cutting edge to extend into the tool body, and opposite first and second side edges between the cutting edge and base edge ('269, figures 5 and 5) . Furthermore, regarding claims 7-9, HETZ teaches a positioning screw (86) and a wedge (83) configured to engage and hold the blade (13) against the outer peripheral portion of the tool body ('269, figures 6 and 7). HETZ also teaches a set of two/three blades (Examiner is defining it to be any two or three consecutive blades) whereby each blade set comprising a left-hand cutter blade (L: see figure below), a right-hand cutter blade (R) (both defining a shear angle) and a raker blade (C), the left-hand and right-hand cutter blades each having its cutting edge formed with a plurality of spaced apart cutting teeth (37) to form grooves (24) in the drive belt, and the raker blade having an edge to form flats between the grooves. Regarding claims 28 and 29, HETZ teaches in figure 3, the blades being axially spaced, therefore a flat will be formed between adjacent grooved sections.

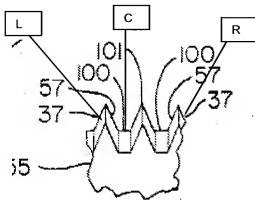


FIG. 8

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10, 11, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (USP 1,514,709).

LYON teaches a blade (55) for use cutting grooved face, the blade being removably insertable into a rotary tool body having a central bore (9), as set forth in the rejection. Furthermore, LYON teaches a set of two peripherally spaced blades comprising a left-hand cutter blade and a right-hand cutter blade (both defining a shear angle) on the peripheral portion of the tool body ('790, figure 3). Regarding claims 10, 11 and 13-16, LYON discloses the claimed invention (i.e.

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shear angle and hook angle) except for shear angle being ~15 degrees or between 10-20 degrees and the hook angle being 0 degrees or 15 degrees or between 10-30 degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose any shear angle or hook angle depending on the machining application, because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

4. Claims 25, 27, 30, 31, 37, 38, 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetz (USP 4,496,269).

HETZ teaches a blade (55) for use cutting grooved face, the blade being removably insertable into a rotary tool body having a central bore (9), as set forth in the rejection Regarding claims 25, 2, 30 and 31, HETZ discloses the claimed invention (i.e. shear angle and hook angle) except for shear angle being between 10-20 degrees and the hook angle being 0 degrees or between positive/10-30 degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose any shear angle or hook angle depending on the machining application, because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Regarding claims 47-50, it would have been an obvious matter of design choice to make the different

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portions of the insert of whatever form or shape was desired or expedient (i.e. tapered/beveled depending on type of groove one desires to make on the belt). A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results.

5. Claims 2-4, 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetz (USP 4,496,269) in view of Dill (USP 4,406,337).

HETZ teaches a blade (55) for use cutting grooved face, the blade being removably insertable into a rotary tool body having a central bore (9), as set forth in the rejection

However, LYON fails to teach locating protuberances.

Dill teaches a cutting insert having spaced apart locating protuberances (41) whereby the protuberances are formed with the insert in the mold ('337, figures 2 and 3). (please note regarding claims 2 and 34, although Dill does not teach one of the protuberances being on the side of the insert, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place the protuberance on a different part of insert, since it has been held that rearranging parts of an invention involves only routine skill in the art).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify HETZ such that the insert includes

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locating protuberances, as taught by Dill for the purpose of preventing rotation of the insert ('337, col. 2, line 65 through col. 3, line 3). Furthermore, Dill this type of retention means does not add to the complexity of the insert.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sara Addisu/
Examiner, Art Unit 3724
9/28/08

/Boyer D. Ashley/
Supervisory Patent Examiner, Art Unit 3724